

# hf Happenings



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the week of 19 October 2015

## The IARU Administrative Council stresses importance of antenna systems for amateur radio

The International Amateur Radio Union (IARU) Administrative Council (AC) has adopted a resolution calling on IARU member societies to encourage governments to recognize the importance of the Amateur Radio Service and of Amateur radio antennas. The AC held its 38<sup>th</sup> meeting on 9 and 10 October in Bali, Indonesia, in conjunction with the IARU Region 3 Conference there.



The antenna resolution also called on member societies "to advocate for planning and development regulations that properly recognize the importance of an Amateur Radio antenna and do not place undue restrictions on the erection of antennas." It also urged member societies to discourage the imposition of any fees related to ham antennas, "particularly in view of the non-pecuniary nature of Amateur Radio and its popularity in the student and senior communities."

The AC completed its preparations to represent Amateur Radio at World Radio-communication Conference 2015 (WRC-15), which will take place during November in Geneva. The AC reviewed IARU positions and strategies for each WRC-15 agenda item

that may affect ham radio. These included proposals for a secondary amateur allocation near 5,3 MHz. The Council also looked ahead to agenda items for the next WRC, which is anticipated for 2019. These would include an amateur allocation at 50 MHz in Region 1 (Europe and Africa) and "global harmonization" of the 1 800 to 2 000 kHz allocation. "It is anticipated that a significant effort by IARU will be needed in preparation for WRC-19 to defend the amateur allocations between 137 and 960 MHz, in light of the pressure for spectrum for small, non-amateur satellites," the AC said in a statement. "Close coordination of regional efforts will be required."

In a departure from its practice of recent years, the Council adopted a continuing theme for World Amateur Radio Day each April - "Celebrating Amateur Radio's Contribution to Society." The Council could adopt a special theme in any given year, if appropriate.

Read more at

<http://www.arrl.org/news/iaru-administrative-council-stresses-importance-of-antenna-systems-for-amateur-radio>.

## SARL 80 m QSO Party

The provisional results of the SARL 80 Metre QSO Party held on 1 October have been released. The committee received 13 logs and it was determined that 37 amateurs were active on the band.

1<sup>st</sup> Thanie Gibson, ZS4AZ, 320 points  
2<sup>nd</sup> Sydney Smith, ZS1TMJ, 310 points  
3<sup>rd</sup> Johan van Zijl, ZS4DZ, 260 points  
4<sup>th</sup> Romeo Nardini, ZS6ARQ, 250 points  
5<sup>th</sup> Phillip van Tonder, ZS6PVT, 225 points  
6<sup>th</sup> Max Bouckley, ZS6MAX, and Ken Gurr, ZS6KN, 210 points each



South African Radio League \* Suid-Afrikaanse Radioliga  
Member Society of the International Amateur Radio Union since 1925



8<sup>th</sup> Mario Beltame, ZS6MAR, 200 points  
9<sup>th</sup> Barry Nugent, ZS2NF, 170 points  
10<sup>th</sup> Dawn Snyders, ZS5ME, 90 points  
11<sup>th</sup> Dennis Green, ZS4BS, 70 points  
12<sup>th</sup> Pieter Jacobs, V51PJ, 60 points

Congratulations to Thanie. No logs received for the first leg in April due to heavy QRM. The committee requests that logs for the 80 metre QSO Party must only be sent in MS Excel format.

### The ZS4 Sprint

The results of the ZS4 Sprint are now deemed as final.

### SARL QRP Contest

The results of the SARL QRP Contest are now deemed as final.

### SARL Hamnet National Exercise - Black-Out

The exercise will take place from 12:00 CAT on Saturday 24 to 12:00 CAT on Sunday 25 October. This year's exercise has a blackout theme and all teams are expected to run their stations off-grid, which includes, heating, cooling, cooking and lighting. We have moved away from a competitive environment to more of a learning exercise. While many stations have previously run radios off batteries, they have used electricity for cooking or lighting. Please be self-critical when evaluating your performances and see where your weaknesses lie.

We have 16 teams from South Africa and Namibia. They are Division 1: Goodwood, Onrus, Seaside, Sedgfield, Touwsrivier and Vaatjie; Division 2: Port Elizabeth; Division 3: Black Rock; Division 4: Vrede; Division 5: Hibiscus; Division 6: Arrow Park, Bethal, Lowveld, Roodeplaat and Vaal; Namibia: Spitskop

This gives a nice spread of teams across the country and having it held almost into summer will make for some interesting changes from the last few exercise. While Division 1 might be worried about the heating of operators, I am sure that some of the

### October

- 1 - SARL 80 metre QSO Party
- 2 - All schools close
- 3 - SARL Spring QRP Contest
- 4 - RSGB 21/28 MHz Contest
- 8 - Log submission for the SARL 80 m QSO Party
- 9 - Meet with Koos, ZR6KF, at the Oakdale ARC
- 10 - Amateur Radio in Action, Cape Town; log submission for the Spring QRP Contest
- 10 and 11 - AWA Valve QSO Party
- 12 - All schools open
- 15 - Radio Amateur Examination
- 16 to 18 - Jamboree-on-the-Air
- 17 - CQ Hou Koers
- 17 - Harrismith Mountain Race
- <http://www.amethyst.co.za/Harrismith/>
- 24 - Crafters Market, Bloemfontein
- 24 and 25 - CQ WW DX Phone Contest

### November

- 1 - All Saints Day; Cape Town International Kite Festival
- 7 - RaDAR Challenge; Winterton Street Festival
- 8 - Remembrance Sunday; PEARS HF Contest; the Big Walk, Cape Town
- 7 and 8 - International Police Association Contest
- 11 - Armistice Day; Diwali
- 10 to 21 - the GWK Cherry Festival in Ficksburg
- 28 and 29 - CQ WW DX CW Contest
- 29 - the 33<sup>rd</sup> Toy Run

other divisions are more concerned about the cooling. If you have not received the information pack by Monday 19 October, please contact Grant, ZS1GS, on 082 490 3465 or e-mail [grant@sao.ac.za](mailto:grant@sao.ac.za).

The entries for the Hamnet National Communications exercise are now officially closed.

### ARRL asks FCC to clarify that amateurs may modify non-amateur gear for amateur use

The ARRL has asked the FCC to make clear that amateur radio licensees may modify non-amateur equipment for use on amateur radio frequencies. Some amateurs have expressed concerns that recently proposed rules would inhibit post-sale modification of

Wi-Fi equipment, now sometimes altered for use on Amateur Radio frequencies. The ARRL made its point in comments filed on 8 October on a *Notice of Proposed Rule Making (NPRM)* in ET Docket 15-170 and RM-11673. The proceeding mostly addresses proposed amendments to FCC rules regarding authorization of RF equipment.

"The Commission should clarify...that the ability of licensed radio amateurs to modify and adapt non-amateur equipment for use in the Amateur Service is beneficial, is permitted, and is not restricted by any rule of general applicability adopted in this proceeding," the League said in its comments. The ARRL said proposed rules requiring manufacturers to include security features to prevent network devices from being modified were "problematic," to the extent that they would preclude hams from adapting network equipment for ham radio applications.

"The Amateur Radio Service has a very long tradition of modification and adaptation of commercial communications equipment," the ARRL pointed out in its comments, asserting that amateur licensees should be permitted to modify any previously authorized equipment for use under Amateur Service rules. The proceeding attracted many comments regarding this aspect of the proceeding, although the proposed rules differ only slightly from the current rules.

The ARRL also urged the FCC not to apply any limitations proposed for software-defined radios to SDRs intended for use exclusively in the Amateur Radio Service, "as has been the policy for the past 10 years."

### "ARRL National Parks on the Air" Event to mark National Park Service Centennial

In 2016, the National Park Service (NPS) will celebrate its 100th anniversary, and radio amateurs will be able to help mark the occasion with the ARRL National Parks on the Air (NPOTA) event. The event kicks off at 00:00 UTC on 1 January 2016.

"As ARRL just celebrated our own Centennial, and Amateur Radio is often enjoyed in the great outdoors, it seemed fitting to devise a program to help NPS celebrate their own 100<sup>th</sup> birthday," said ARRL Media and Public Relations Manager Sean Kutzko, KX9X. NPOTA will run throughout 2016, with activity promoted and encouraged from each of the more than 430 official NPS administrative units and affiliated areas across the US. This includes all 59 National Parks as well as National Battlefields, Historic Sites, Memorials, Preserves, Reserves, Rivers, Seashores, National Scenic Trails, and other units.

The program will have two participation tracks - Chasers and Activators. Chasers will simply attempt to make contact with operators in as many of the NPS units as possible. Activators will attempt to activate as many of the units as possible. NPOTA participants may serve in both roles. Chaser and Activator totals will be tracked via an online Leader Board based on LoTW data, just as was done during the Centennial QSO Party. Access the NPOTA Leader Board directly at <http://npota.arrl.org>.

Modelled after the Mixed DXCC award, only one contact with any given NPS unit will be required, and no tally will be kept of NPS units based on bands or modes. NPOTA will be administered entirely through Logbook of The World (LoTW). No paper logs or QSLs will be accepted for NPOTA credit. Each NPS unit will be added to LoTW as a "location."

Chaser Award and Activator Award certificates will be available to any radio amateur who has at least one confirmed contact with an NPS unit or who activates at least one unit, respectively. A station's total number of confirmed or activated units will be printed on the certificate. The National Parks Honour Roll certificate will be available to any station confirming contact with at least 75 percent of the 59 National Parks *activated* in 2016.

While there is no formal partnership between NPS and ARRL for this event, the League has been in discussions with the NPS

over the past year, and the National Park Service is aware that increased Amateur Radio activity in their parks is likely during 2016.

The NPOTA will use the official list of NPS Administrative Units and Affiliated Areas as defined and maintained by NPS <http://www.nps.gov/aboutus/faqs.htm>. Complete details on National Parks on the Air are available on the ARRL website <http://www.arrl.org/NPOTA>.

## DXCC News

Sharon Taratula, the Awards Manager at the ARRL Radiosport Department, reports that the DXCC Department has approved the following operations:

TZ4AM, 2015/2016 Operations

VK9LN, 2015/2016 Operations

D44TUQ, 2015 Operation

## African DX

The Gambia C5. Luc, F5RAV (C5LT) and Gerard, F5NVF (C5C) will be active from Kololi between 20 and 27 October. Activity will be on 40 to 10 metres using SSB, RTTY and possibly CW. Operations will also include the CQ WW DX SSB Contest (24 and 25 October) using the shorter call sign C5C. Mustapha, C5MF, their guide in the Gambia and a new amateur will be making his first QSOs with you. QSL via C5LT, C5C and C5MF only direct to F5RAV.

Mozambique, C9. John, ZS5J, and YL Beth, 2W0VOW, will once again be active from Mozambique to take part in a DXpedition between 20 October and 3 November. They will be driving in a 4X4 vehicle, as that is the only access to the seaside town called Ponta do Ouro and can only be reached by using a 4X4 vehicle. John informs that they will be using the call sign C91B this time. Beth will be operating a SSB station and John will primarily be operating the CW station. Activity will be on all HF bands from 160 to 6 metres. They will be using Flex radios, and the amplifiers will be the new SPE Expert 1.3K and a

Yaesu FL-7000. Antennas will be a variety of verticals for the low bands, loops, rotary dipoles and 2 element vertical beams for the higher bands. A 4-element yagi will be used on 6 metres. Free daily logbook uploads will be done to LoTW and ClubLog and if you need a QSL card sent by e-mail, the address and information is on QRZ.com. John also mentioned, "Thanks to Michael of ClubLog, C91B has been given expedition status on ClubLog, and the leader board will be activated."

Morocco, CN3. Stefano, IK2QEI, Matteo, IK2SGC, Marco, IK2LFF, Manuel, IK3STG, Filippo, IZ1LBG and Roberto, I2WIJ will be active as CN3A from Safi during the CQ WW DX SSB Contest (24 and 25 October) as a Multi-? entry. QSL via LoTW or via IV3ZXQ. Visit their Web page at <http://www.facebook.com/pages/CN3A/112969535390789>

Lesotho, 7P. Chris, MW6GOZ, will be active as 7P8GOZ from Lesotho sometime in December during the Christmas holiday. Activity will be on 40 and 20 metres using SSB. QSL via his home call sign or LoTW. Chris has now set up a Blog page for his upcoming operation at (still under construction) <https://7p8goz.wordpress.com/about>

## African Islands

IOTA frequencies

CW: 28 040 24 920 21 040 18 098 14 040 10 114 7 030 3 530 kHz

SSB: 28 560 28 460 24 950 21 260 18 128 14 260 7 055 3 760 kHz

Canary Islands, EF8. Operators Juan, EA8RM, Alexandr, UA5C, Leonid, RA5A, Sergey, RN3QO, Tony, RT9T, Alexey, RW3QNZ, Roli, LY4A and Jack, R2AA will be active as EF8R from Gran Canaria Island (AF-004) during the CQ WW DX SSB Contest (24 and 25 October) as a Multi-Single entry. QSL via LoTW.



Cape Verde, D4. Andrea, HB9DUR, will once again be active as D4C from Sao Vicente Island (AF-086). Activity will take place during the CQ WW DX SSB Contest (24 and 25 October). QSL via IZ4DPV, direct or by the Bureau.

Cape Verde D4. Massimo, IZ4DPV, will once again be active from Sao Vicente Island (AF-086), but as D4F this time. Activity will be during the CQ WW DX SSB Contest (24 and 25 October) as a Single-Op/Single-Band (??) entry. QSL via IZ4DPV, direct or by the Bureau.

Madeira Island CR,. Jose, CT1BOH, will be active as CR3OO during the CQ WW DX CW Contest (28 and 29 November). No other details were provided. QSL via W3HNK.

Reunion Island, FR. Anne, OH2YL, will be active as FR/OH2YL from Reunion Island during the CQ WW DX CW Contest (28 and 29 November). QSL via her home call sign.

African Italy, AF-018. Operator Raffaele, IH9YMC, will be active from Pantelleria Island (WW Loc JM56xt), African Italy, during the CQ WW DX CW Contest (28 and 29 November) as a Single-Op/Single-Band (??) entry. QSL via eQSL.

Sao Tome and Principe, S9. Bruno, HB9BEI, will be active as S9BK (pending) from Sao Tome and Principe between 25 February and 25 March 2016. His plans are to be active from Sao Tome (AF-023) between 25 February and 7 March, then on to Principe (AF-044) between 7 and 12 March and then ending back on Sao Tome from 12 to 24 March. Activity will be holiday style on 40 to 10 metres using SSB and the digital modes. QSL via his home call sign.

### Word to the Wise

QLF - used in CW communications, meaning, "I am sending with my left foot." To use the interrogative form, follow with a question mark: QLF? Translation: "Are you

sending with your left foot?" Most often heard around the beginning of a new calendar year, coincident with SKN.

### Operating Tip

Four little reminders prompted by operating in the CQ WW RTTY Contest last month:

If you are S&P'ing, you generally do not need to send the CQing station's call sign.

On RTTY, send 599, not 5NN. 599 sends the character 5, then 9, then 9 - three characters in total. Sending 5NN sends the character 5, then the non-printing LTR character, then N, then N - four characters in total.

Do not send ANY canned information from any database, like the other stations name. Yes, it is cool that you can do that. Refrain. Just send the contest exchange. Besides, it is a little awkward when the name in the database is "Roberto" but everyone knows the operator as "Bob."

There is no need to send 599 twice in the exchange.

### Receiving Antenna for 160 m

If you are looking for a new 160 m receive antenna for a space constrained location, perhaps you should give the DHDL antenna a look

<http://www.ok1rr.com/index.php/antennas/42-double-half-delta-loop-rx-antenna>.

Developed for the TX3A DXpedition, it is a Double Helix Delta Loop and boasts an RDF improvement of 2,5 dB over a single flag antenna of similar dimension.

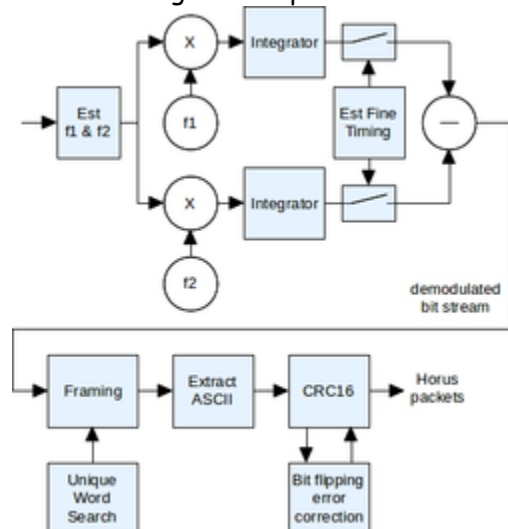
DH1TW tried this antenna at ED1R and reported his favourable results <http://www.dh1tw.de/double-half-delta-loop-dhdl-receiving-antenna>.

### Building an FSK Decoder

Building an FSK Decoder using open source tools for use in high-altitude balloon telemetry [www.rowetel.com/blog/?p=4629](http://www.rowetel.com/blog/?p=4629).

Written by David Rowe, VK5DGR, author of FreeDV, this is a great blog post

illustrating how a design for a software modem was developed using open source software, tested, and deployed against real-world signals. Some interesting findings include that using reasonable hardware, performance was adequate using GNU Octave, without compiling the design further, to decode real-world signals and that a real-world driver must be able to accommodate variation in the sender's clock rate. Perhaps this article will spur others to do their own RTTY decoder design and experimentation.



Block diagram of VK5DGR's FSK demodulator built using GNU Octave. (Courtesy VK5DGR)

## History this week

The week starting 19 October 2015

1632 - British architect Christopher Wren (1632 - 1723) was born in Wiltshire, in southwestern England

1805 - The Battle of Trafalgar took place between the British Royal Navy and the combined French and Spanish fleets. The victorious British ended the threat of Napoleon's invasion of England. British naval hero Admiral Horatio Nelson was mortally wounded aboard his ship Victory

1811 - Hungarian composer Franz Liszt (1811 - 1886) was born in Raiding, Hungary

1854 - During the Crimean War, the Charge of the Light Brigade occurred as Lord Cardigan led the British cavalry against the Russians at Balaclava. Of 673 British cavalrymen

taking part in the charge, 272 were killed. Alfred Lord Tennyson later immortalized the Charge in the poem

1879 - Thomas Edison successfully tested an electric incandescent lamp with a carbonized filament at his laboratory in Menlo Park, New Jersey, keeping it lit for over 13 hours

1881 - Pablo Picasso (1881 - 1973) was born in Malaga, Spain

1915 - The first transatlantic radio voice message was made by the American Telephone and Telegraph Company from Virginia to Paris

1942 - British General Bernard Montgomery launched a major offensive against the German forces under Erwin Rommel at El Alamein, Egypt

1944 - During World War II in the Pacific, General Douglas MacArthur set foot on Philippine soil for the first time since his escape in 1942, fulfilling his promise, "I shall return."

1945 - The United Nations was founded

1955 - The Return of the King is published.

The third book of the Lord of the Rings trilogy (20 Oct)

1955 - Dennis, ZS1AU, and Joan say "I do" and the Minister says, "You may kiss the bride!" (22 Oct)

1956 - A Hungarian uprising against Communist rule began with students and workers demonstrating in Budapest

1989 - Hungary declared itself a republic 33 years after Soviet Russian troops crushed a popular revolt against Communist rule

2941 (SR) Bilbo and the Dwarves sit around and begin to think of what to do next at the Hidden Door. (20 Oct)

3018 (SR) Council of Elrond (25 Oct)

Get on the **RaDAR**....and GO!

**RADAR**  
GOES GLOBAL

## Contest Calendar

This week's contests compiled by Bruce Horn, WA7BNM. The period covered is 19 to 26 October 2015

### Run for the Bacon QRP Contest

01:00 - 03:00 UTC 19 October

Mode: CW

Bands: 160, 80, 40, 20, 15, 10 m

Classes: Single Band; All Band

Max power: 5 watts

Exchange: RST, state, province or country and member no or power

Work stations: Once per band

QSO Points: 1 point per QSO with non-member; 3 points per QSO with member on same continent; 5 points per QSO with member on different continent

Multipliers: Each state, province or country once; Multiply mults by 2 if >50 members worked

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 25 October 2015

E-mail logs to: (none)

Upload log at:

<http://fpgrp.org/pigrun/autolog.php>

Mail logs to: (none)

Find rules at: <http://fpgrp.org/pigrun/>

### ARRL School Club Roundup

13:00 UTC 19 October to 23:59 UTC 23 October

Mode: CW/RTTY/Digital, Phone

Bands: All, except 60, 30, 17, 12 m

Classes: Single Op (I); Club/Multi-Op (C); School Club/Group (S)

Max operating hours: 24 hours total; 6 hours out of any 24-hour period with off times of at least 30 minutes

Exchange: RS(T), Class (I/C/S) and state, province or country

Work stations: Once per mode

QSO Points: 1 point per phone QSO; 2 points per CW/RTTY/digital QSO

Multipliers: States and VE provinces and DXCC countries and (2 x class C QSOs) and (5 x class S QSOs)

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 7 November 2015

Post log summary at:

<http://www.b4h.net/arrlscr/>

Mail logs to: School Club Roundup; c/o LIMARC; PO Box 392; Levittown, NY 11756; USA

Find rules at:

<http://www.arrl.org/school-club-roundup>

### Phone Fray

02:30 - 03:00 UTC 21 October

Mode: SSB

Bands: 160, 80, 40, 20, 15 m

Classes: Single Op

Max power: 100 watts

Exchange: NA: Name and state, province or country; non-NA: Name

Work stations: Once per band

QSO Points: NA station: 1 point per QSO; non-NA station: 1 point per QSO with an NA station

Multipliers: Each US state (including KH6/KL7) once per band; Each VE province/territory once per band; Each North American country (except W/VE) once per band

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 03:00 UTC 23 October 2015

E-mail logs to: (none)

Post log summary at:

<http://www.3830scores.com>

Mail logs to: (none)

Find rules at:

[http://www.perluma.com/Phone\\_Fray\\_Conests\\_Rules.pdf](http://www.perluma.com/Phone_Fray_Conests_Rules.pdf)

### CWops Mini-CWT Test

13:00 - 14:00 UTC and 19:00 - 20:00 UTC 21 October and 03:00 - 04:00 UTC 22 October

Mode: CW

Bands: 160, 80, 40, 20, 15, 10 m

Classes: Single Op (QRP/Low/High)

Max power: HP: >100 watts; LP: 100 watts; QRP: 5 watts

Exchange: Member: Name and member no; non-Member: Name and state, province or country

Work stations: Once per band  
QSO Points: 1 point per QSO  
Multipliers: Each call once  
Score Calculation: Total score = total QSO points x total mults  
Submit logs by: 04:00 UTC 24 October 2015  
Post log summary at:  
<http://www.3830scores.com>  
Mail logs to: (none)  
Find rules at:  
<http://www.cwops.org/cwt.html>

NCCC RTTY Sprint  
01:45 - 02:15 UTC 23 October  
Mode: RTTY  
Bands: (see rules)  
Classes: (none)  
Exchange: Serial no, name and QTH  
Score Calculation: Total score = total QSO points x total mults  
Submit logs by: 25 October 2015  
E-mail logs to: (none)  
Post log summary at:  
<http://www.3830scores.com/>  
Mail logs to: (none)  
Find rules at:  
<http://www.ncccsprint.com/rttyns.html>

NCCC Sprint  
02:30 - 03:00 UTC 23 October  
Mode: (see rules)  
Bands: (see rules)  
Classes: (none)  
Exchange: Serial no, name and QTH  
Score Calculation: Total score = total QSO points x total mults  
Submit logs by: 25 October 2015  
E-mail logs to: (none)  
Post log summary at:  
<http://www.3830scores.com/>  
Mail logs to: (none)  
Find rules at:  
<http://www.ncccsprint.com/rules.html>

CQ Worldwide DX SSB Contest  
00:00 UTC 24 October to 24:00 UTC 25 October  
Mode: SSB  
Bands: 160, 80, 40, 20, 15, 10 m

Classes: Single Op All Band - QRP, low or high - option: classic or rookie; Single Op Single Band - QRP, low or high; Single Op Assisted All Band - QRP, low or high; Single Op Assisted Single Band - QRP, low or high; Multi-Single; Multi-Two; Multi-Multi  
Max power: HP: 1 500 watts; LP: 100 watts; QRP: 5 watts  
Exchange: RS and CQ Zone no  
Work stations: Once per band  
QSO Points: 0 points per QSO with same country (counts as mult); 1 point per QSO with different country same continent; 2 points per QSO with different country same continent (NA); 3 points per QSO with different continent  
Multipliers: Each CQ zone once per band; Each country once per band  
Score Calculation: Total score = total QSO points x total mults  
Submit logs by: 23:59 UTC 30 October 2015  
E-mail logs to: [ssb@cqww.com](mailto:ssb@cqww.com)  
Upload log at:  
<http://www.cqww.com/logcheck/>  
Web-to-Cabrillo form:  
[http://www.b4h.net/cabforms/cqwwssb\\_cab.php](http://www.b4h.net/cabforms/cqwwssb_cab.php)  
Mail logs to: CQ WW DX Contest, Box 481, New Carlisle, OH 45344, USA  
Find rules at:  
<http://www.cqww.com/rules.htm>

## Next Week's Contests

SKCC Sprint, 00:00 - 02:00 UTC 28 October  
Phone Fray, 02:30 - 03:00 UTC 28 October  
CWops Mini-CWT Test, 13:00 - 14:00 UTC and 19:00 - 20:00 UTC 28 October and 03:00 - 04:00 UTC 29 October  
UKEICC 80 m Contest, 20:00 - 21:00 UTC 28 October  
RSGB 80 m Club Sprint, SSB, 19:00 - 20:00 UTC 29 October  
NCCC RTTY Sprint, 01:45 - 02:15 UTC 30 October  
NCCC Sprint, 02:30 - 03:00 UTC 30 October  
Feld Hell Sprint, 00:00 - 23:59 UTC 31 October



Russian WW MultiMode Contest, 12:00 UTC  
31 October to 11:59 UTC 1 November  
High Speed Club CW Contest, 09:00 - 11:00  
UTC and 15:00 - 17:00 UTC 1 November  
ARS Spartan Sprint, 01:00 - 03:00 UTC 3  
November

Items used with acknowledgement to the  
ARRL Letter, the ARRL DX News, the ARRL  
Contest Update, OPDX Bulletin, 425 DX Bul-  
letin, DXNL Newsletter, WIA-News, the  
RSGB News, DxCoffee, Southgate ARC  
News, DX World and the Amateur Radio  
Newsletter